

1999 Update to the 8th Edition of the Table of Isotopes CD-ROM

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The 8th edition of the *Table of Isotopes*^{*} was published in 1996 by John Wiley & Sons, Inc. The two-volume, 3168 page, cloth-bound, edition contains nuclear structure and decay data for over 3100 isotopes and isomers, extensive appendices, and about 24,000 reference citations. The book is packaged with an interactive CD-ROM containing the *Table of Isotopes* in Adobe Acrobat Portable Document Format (PDF) suitable for viewing with PC and Macintosh computers and UNIX workstations. The CD-ROM version contains a chart of the nuclides graphical index, separate indices organized for applied radioisotope users and nuclear structure physicists, and over 100,000 hypertext links to move the user rapidly through related information. The CD-ROM also contains the *Table of Superdeformed Nuclear Bands and Fission Isomers*, the Evaluated Nuclear Structure Data File (ENSDF), and the Nuclear Science Reference file (NSR). Over 3000 copies of the 8th edition have been distributed through 1998. In 1998, a soft cover reprint of the 8th edition of the *Table of Isotopes*, without CD-ROM, was released by John Wiley & Sons, Inc.

The 8th edition of the *Table of Isotopes* CD-ROM was updated in 1998, with over 3500 isotopes and isomers, and again in 1999 with over 3700 isotopes and isomers. These updates also include newly evaluated mass chain data from the ENSDF file, revised appendices, and an updated version of the *Table of Superdeformed Nuclear Bands and Fission Isomers*.

Two new features have been added to the CD-ROM updates; Isotope Explorer software and a local *Table of Isotopes* Internet home page. Isotope Explorer version 2.2 is a Windows 95/98/NT helper application for viewing ENSDF and NSR data either locally from the CD-ROM or remotely over the Internet from the Isotopes Project server. The Internet home page provides HTML access to the Table of Isotopes appendices and additional data for atomic masses, thermal neutron capture, spontaneous fission, and nuclear astrophysics. Links are also provided to the Isotope Explorer software, manuals, and data files, and to the WWW *Table of Isotopes* home page which is regularly updated.

The updates to the 8th edition of the *Table of Isotopes* CD-ROM come packaged with a handy booklet that includes introductory material. The 1998 booklet also includes the Isotope Explorer manual, an isotope/isomer summary table, and energy ordered tables of γ -rays and alpha particles from radioactive decay parents. The 1999 booklet includes a nuclear structure summary table which contains level and rotational band information from over 3700 nuclides.

Footnotes and References

*R.B. Firestone, V.S. Shirley, C.M. Baglin, S.Y.F. Chu, and J. Zipkin. 8th edition of the *Table of Isotopes*, John Wiley & Sons, Inc. (1996).